

MANUFACTURE OF CERAMIC COIL COMPONENT

Patent number: J P3233915
Publication date: 1991-10-17
Inventor: BANDAI HARUFUMI; others: 01
Applicant: MURATA MFG CO LTD
Classification:
- international: H01F41/04; H01F17/00
- european:
Application number: JP19900029870 19900208
Priority number(s):

Abstract of JP3233915

PURPOSE: To manufacture a small, high-inductance and high-Q ceramic coil component in a simple process and efficiently by a method wherein a wound body is baked, a spiral gap path is formed in a sintered body, a molten metal is injected into the gap path and a spiral conductive part is formed.

CONSTITUTION: A wound body 24 on which a ceramic green sheet 21 has been wound is baked. A molten metal is injected into a formed spiral gap path and is solidified. Thereby, a spiral conductive part can be formed.

Consequently, a ceramic coil component can be obtained by a comparatively simple process. In addition, the main face of the spiral conductive part 31 is extended spirally from one end side toward the other end side of a cylindrical ceramic sintered body while it is in the direction parallel with the outer circumference face of the ceramic sintered body. Consequently, it is possible to sharply expand the effective cross-sectional area of a coil. Thereby, the ceramic coil component which is small and whose inductance value is high can be obtained. Since it is not required to narrow the width of a conductive path, there is no fear of a drop in a Q.

